CASE HISTORY

Inflatable Bridge Plug

OPEN HOLE, VERTICAL COMPLETION PRODUCING EXCESS WATER

Inflatable Bridge Plug Used to Shut Off Water

Location: West Texas

CHALLENGE: An oilfield producing from a reef type carbonate formation exhibits a continual rise in the oil/water contact. Wells are vertical, open hole completions at an average depth of 2,500 ft and the field has both water and gas injection for pressure maintenance and improved recovery.

SOLUTION: An inflatable bridge plug (IBP) was run and set 5 ft above the O/W contact and a 5 ft cement plug placed above the IBP.

RESULTS AND BENEFIT: The well was returned to production with water cut reduced from 90% down to 10% and total fluid production increased by more than 1,000 BPD. The workover was achieved using a hydraulic snubbing unit to minimize formation damage typically associated with loss of produced brine into the high permeability formation. Some wells were completed without the cement plug to allow moving and repositioning the tool as the O/W contact rises.